

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application. Claims 1-2 and 5-16 are currently pending in this application. No claims have been amended. Accordingly, no new matter has been added.

In view of the remarks herein, Applicants respectfully request that the Examiner withdraw all outstanding rejections and allow the currently pending claims.

Issues Under 35 U.S.C. §103(a)

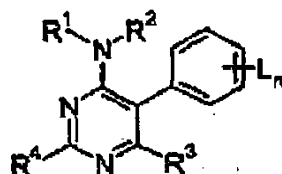
Claims 1-2, 5, 11 and 13-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Grote et al. (Grote '753). Applicants respectfully traverse.

The Examiner repeats the rejection issued on July 17, 2007, and reaffirms his previous position that Grote '753 discloses a core structure and compounds which would render claims 1-3 and 5 obvious. The Examiner asserts that the only distinction between the compounds disclosed by Grote '753 and the presently claimed compound is the presence of an oxo group attached at the 5-position of the pyrazole and the triazole. The Examiner concludes that it would have been obvious to one skilled in the art to modify the compound disclosed by Grote '753 "with a reasonable expectation of success of obtaining compounds with analogous properties". Applicants respectfully disagree.

Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Additionally, there must be a reason why one of

ordinary skill in the art would modify the reference or combine reference teachings to obtain the invention. A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007). There must be a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* The Supreme Court of the United States has recently held that the "teaching, suggestion, motivation test" is a valid test for obviousness, albeit one which cannot be too rigidly applied. *Id.* Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.*

As previously discussed, Grote '753 discloses compounds of the formula (I):



However, Applicants respectfully submit that it would not have been obvious to one skilled in the art to make the specific selection of compounds presently claimed based on the teachings of Grote '753.

For instance, Grote '753 discloses that the ortho-position of the phenyl ring (corresponding to L' in the presently pending claims) may be substituted or unsubstituted. However, in the presently claimed compound, a substituent selected from F, Cl, CH₃ and CF₃ is **required** in this position (emphasis added) (see, e.g., claim 5).

Moreover, the 4-position of the pyrimidine ring (R^3) may be substituted or unsubstituted in Grote '753. However, a halogen substituent (R^3) is **required** in this position in the compound of the present invention (emphasis added).

The Examiner's attention is respectfully directed to the Examples in Grote '753. Applicants note that all of the disclosed examples in this reference have a **heteroaromatic** substituent in the 2-position of the pyrimidine ring (corresponding to R^4) (emphasis added). In stark contrast, the pyrazolone group R^4 of the presently claimed compound is a partially unsaturated heterocyclic compound. Grote '753 does not suggest that the heteroaromatics could be replaced with the presently claimed specific heterocyclic group. Moreover, one skilled in the art would not have been motivated to replace a heteroaromatic with a group that has a carbonyl group and an amino imino group adjacent to the nitrogen bonded to position 2 of the pyrimidine ring.

Accordingly, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness, as Grote '753 does not teach or suggest each and every limitation of the present invention. For this reason alone, the present rejection should be withdrawn.

Moreover, Applicants submit that the superior and unexpected properties exhibited by the compound of the present invention rebut any *prima facie* case of obviousness arguably established by the Examiner.

The Examiner's attention is directed to the results of the Comparative Tests enclosed herewith, which demonstrate the significantly superior efficacy of the compounds of the present invention in comparison to the structurally closest compounds of Grote '753. For instance, plants treated with the compound of Grote '753 exhibit an infection of 40%, whereas plants treated with

the presently claimed compound exhibit only 5% of infection. The superior fungicidal action obtained by the present invention would not have been expected by or obvious to one skilled in the art.

Because the invention, as set forth in Applicants' claims, is not disclosed or made obvious by the cited prior art, reconsideration and withdrawal of this rejection are respectfully requested.

Double Patenting Issues

Claims 1-2, 5, 11 and 13-16 stand rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-4 and 7 of U.S. 7,153,860 (Grote '860). Applicants respectfully traverse.

A review of the scope of the claims of Grote '860 reveals that there is no overlap between the claims of this reference and the presently pending claims. Moreover, the above noted distinctions between the present invention and Grote '753 apply in the instant case, as Grote '860 is merely the national U.S. application of Grote '753. As previously noted, the present invention is patentably distinct from Grote '753, and thus Grote '860.

Reconsideration and withdrawal of this rejection are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and objections and that they be withdrawn. It is believed that a

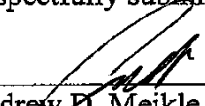
full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Andrew D. Meikle, Reg. No. 32,868 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

Dated: SEP 02 2008

Respectfully submitted,

By 
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Enclosure: Comparative Tests

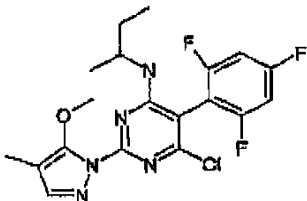
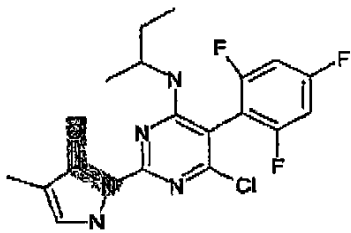
Comparative Tests

The active ingredients were used separately to prepare a stock solution comprising 25 mg active ingredient, which was filled up with a mixture of acetone and/or DMSO and the emulsifier Uniperol® EL (emulsifying and dispersing wetter based on ethoxylated alkylphenols) in a volume ratio solvent : emulsifier of 99 : 1 ad 10 ml solution. Afterwards water was added ad 100 ml. This stock solution was diluted with the above described solvent : emulsifier : water mixture to give the desired active ingredient concentrations stated below.

Comparative Test 1:

Control of gray mould (*Botrytis cinerea*) on paprika leaves in a seven day protective application

Paprika seedlings of the "Neusiedler Ideal Elite" variety were sprayed to run-off at the four- to five leave stage with an aqueous suspension containing the concentration of active ingredient mentioned below. After seven days the plants were inoculated with a spore suspension of *Botrytis cinerea* containing 1.7×10^6 spores per ml in 2 wt-% aqueous biomalt solution. The infected plants were then incubated in chambers with high humidity for five days at 22-24 °C. The extent of fungus spread was assessed as %-attack of the whole leaf surface, which made it possible to judge not only the fungicidal action of the active ingredient but also the long term effect.

| WO-A-02 074753 (D1) Comparative Example | US Appl. No. 10/555,894 Invention |
|---|--|
| <div style="text-align: center;">  </div> <p>(A)</p> | <div style="text-align: center;">  </div> <p>(B)</p> |

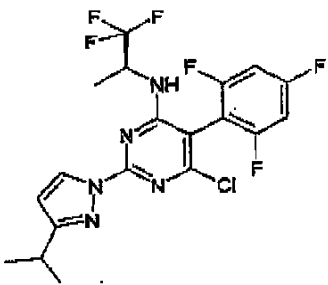
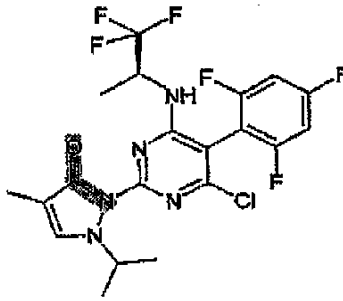
In this test, the plants which had been treated with 63 ppm of the comparative compound (A) from D1 showed an infection of 40%, while with 63 ppm of the inventive compound (B) the

plants showed an infection of only 5%. The untreated control plants showed an infection of 85%.

Comparative Test 2:

Action against mildew of wheat caused by *Erysiphe [syn. Blumeria] graminis forma specialis tritici*

Leaves of pot plants of wheat seedlings were sprayed until dripping with an aqueous suspension having a concentration of the active ingredient as given below. The suspension or emulsion was prepared as described above. 24 hours after the spray coating had dried on, the test plants were dusted with spores of mildew of wheat (*Erysiphe [syn. Blumeria] graminis forma specialis tritici*). Thereafter, the test plants were placed in a greenhouse at temperatures between 20 and 24°C and a relative atmospheric humidity of 60 to 90%. After 7 days, the extent of mildew development was determined visually in % of the whole leaf area.

| WO-A-02 074753 (D1) Comparative Example | US Appl. No. 10/555,894 Invention |
|--|---|
|  <p>(C); chiral, Example I-58</p> |  <p>(D); chiral</p> |

In this test, plants which had been treated with 63 ppm of the comparative compound (C) of D1 showed an infection of 70%, while with 63 ppm of the inventive compound (D) the plants showed an infection of only 7%. The untreated control plants showed an infection of 70%.